

**IN THE SPECIFICATION:**

The specification as amended below with replacement paragraphs shows added text with underlining and deleted text with ~~strikethrough~~.

Please REPLACE the paragraph beginning at page 29, line 22, with the following paragraph:

As shown in FIG. 2010, the point  $(st, 0)$  corresponding to the leftmost point  $L_k$  of the category 5 is searched for by inversely tracing the optimum route to the point  $(x, y_1)$  corresponding to the rightmost point  $R_k$  of the category 5. When the point  $(st, 0)$  corresponding to the leftmost point  $L_k$ , the value  $st$  on the  $x$  axis is defined as the starting point of the category 5 at the coordinate  $x$ .